

Remarks

The Office action mailed on December 16, 2005, has been reviewed and carefully considered. Claims 1-10 have been cancelled. New claims 11-37 have been added. After entry of this amendment, claims 11-37 will be pending.

I. Oath/Declaration

The Declaration filed with the application was objected to for not including the mailing address and residence city of each named inventor. In a phone conference on May 24, 2006, Examiner Geisel indicated that the omitted information can be provided in the form of an Application Data Sheet rather than a new declaration. Accordingly, an Application Data Sheet is enclosed with this Amendment as Appendix 1.

II. Abstract

The abstract was objected to because its length exceeded 150 words. The abstract has been amended to reduce its length and for clarity. No new matter has been added.

III. Claim Objections

Claims 1-10 were objected to for allegedly including inconsistent wording. Claims 1-10 have been cancelled, so this objection is mooted.

IV. Claim Rejections - 35 U.S.C. §112

Claims 1-10 were rejected under 35 U.S.C. §112 as allegedly failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claims 1-10 have been cancelled, so this rejection is mooted.

V. Claim Rejections - 35 U.S.C. §102

Claims 1, 9 and 10 were rejected under 35 U.S.C. §102 as allegedly being anticipated by German Reference No. 1 99 55 759 A1 (Stock). Claims 1, 9 and 10 have been cancelled, so this rejection is mooted.

VI. Claim Rejections - 35 U.S.C. §103

Claim 2 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Stock in view of U.S. Publication No. 2002/0126280 (Mikes). Claim 2 has been cancelled, so this rejection is mooted.

VII. New Claims

New claims 11-37 have been added to further claim the patentable features of the invention. Support for new claims 11, 14, 20, 22, 26, 29, 31 and 34 can be found, for example, in original claim 1 and FIG. 6. Support for new claims 12, 13, 21, 23 and 25 can be found, for example, in FIG. 6. Support for new claims 15 and 35 can be found, for example, in the specification at page 9, line 6. Support for new claims 16 and 37 can be found, for example, in original claim 9. Support for new claim 17 can be found, for example, in the specification at page 5, line 13 and in original claim 9. Support for new claims 18, 19 and 32 can be found, for example, in the specification at page 6, lines 10-14. Support for new claims 24, 30, 33 and 36 can be found, for example, in the specification at page 9, lines 16-17. Support for new claim 27 can be found, for example, in original claims 7 and 8. Support for new claim 28 can be found, for example, in the specification at page 14, lines 12-13.

An English-language translation of the text of Stock is included with this Amendment as Appendix 2. New independent claims 11, 20, 22, 31 and 34 each recite a scanning monochromator, a method for using the scanning monochromator, or a method for making the scanning monochromator. The scanning monochromator recited in claims 11, 20, 22, 31 and 34 includes a collimator mirror, an angle-adjustable mirror, and a diffraction grating separate from the angle-adjustable mirror. Stock, alone or in combination with any of the other cited references, fails to disclose this combination of elements.

The scanning monochromator recited in claims 11, 20, 22, 31 and 34 offers unexpected advantages over prior art devices. For example, the scanning monochromator generally is more compact, and/or less expensive, and/or exhibits less noise than prior art devices. In addition, the claimed scanning monochromator is more effective when used with near infrared and middle infrared light due, at least in part, to reduced absorption losses. It also is compatible with multiple detectors, thus allowing a wider range of wavelengths to be analyzed.


Included with this Amendment as Appendix 3 is a Declaration under 37 C.F.R. § 1.132 by Dr. Reinhard Bruch distinguishing Stock and stating advantages of the claimed embodiments over prior art devices. Advantages of the claimed subject matter are part of the "subject matter as a whole" that must be shown to be obvious over the prior art under section 35 U.S.C. § 103. Since the cited references do not disclose any such advantages of the claimed subject matter, the references do not render the advantages, or the subject matter as a whole of which they are a part, obvious. The claimed subject matter is therefore allowable over these references as a matter of law.

New dependent claims 12-19, 21, 23-30, 32-33 and 35-37 each depend from one of the independent claims discussed above, and therefore are allowable over the cited references for the reasons stated for each independent claim. Each of the dependent claims is further allowable in view of the patentable combination of features recited in such dependent claim. For example, new claims 27 and 28 recite two detectors. This allows the device to scan a larger range of wavelengths. Stock fails to disclose the use of more than one detector.

VIII. Conclusion

It is respectfully submitted that the present claims are in condition for allowance. Should there be any questions regarding this application, Examiner Geisel is invited to contact the undersigned attorney at the telephone number shown below.

Respectfully submitted,
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